

EXHIBIT 16



Storage Solutions Guide

OCT 2012 | AMER



Holidays happen.



Back them up.

With a Backup Plus drive, they'll never miss the moment.

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External Storage




At-a-Glance Product Comparison

BACKUP PLUS				
Direct Attached/ Portable				
	Backup Plus Portable	Backup Plus Portable for Mac	Thunderbolt™ Backup Plus for Mac Portable	Backup Plus Desktop
PERFECT FOR	Protecting and sharing digital memories			Keeping your digital life safe and sound
DESCRIPTION	Store and back up the content on your social networks with these flexible, portable drives. PC or Mac.			These desktop drives provide the simple, one-click way to protect and share files. PC or Mac.
LEARN MORE	Page 5	Page 6	Page 6	Page 8
				Page 7

GOFLEX	
Wireless Mobile	
	GoFlex Satellite™
PERFECT FOR	Wireless storage for your tablet
DESCRIPTION	Take your media library on the go and stream it wirelessly to your iPad, Android tablet and smartphone. PC or Mac.
LEARN MORE	Page 10

GOFLEX	
Network Attached	
	GoFlex Home
PERFECT FOR	Wireless centralized home storage
DESCRIPTION	This network storage system supports the external storage needs of every computer in your home. PC or Mac.
LEARN MORE	Page 11

	SLIM		EXPANSION™	
				
Thunderbolt™ Backup Plus for Mac Desktop	Slim Portable	Slim Portable for Mac	Expansion Portable	Expansion Desktop
Keeping your digital life safe and sound	Thin storage that fits—and goes—anywhere		Protecting and sharing your digital life	
These desktop drives provide the simple, one-click way to protect and share files. PC or Mac.	This ultra-thin metal design is the world's sleekest portable external hard drive. PC or Mac.		Expansion drives allow you to instantly add more storage space to your computer and take large files with you.	
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BLACKARMOR®		
		
BlackArmor NAS 440	BlackArmor NAS 400	BlackArmor NAS 220
Full-system backup, RAID 0, 1, 5, 10 or JBOD		Full-system backup, RAID 0 or 1
A complete, small-business-specific network storage solution designed to provide optimum uptime and data integrity for up to 50 workstations.		A network attached storage solution designed to provide centralized storage and data backup.
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External Storage Solutions

Seagate external storage solutions are sleek, dependable and ultra-portable products that let your customers automatically and continuously store digital family photos, protect critical business data, back up multiple computers on a small network, or share and store videos and music.



Backup Plus

The Backup Plus portable drive is the simple way to protect and share your entire digital life.

Key Advantages

- Easy, flexible backups
- Automatically saves photos from social networks
- Photos and videos can be shared to social networks with a click.
- Thunderbolt technology or FireWire 800 upgrade allows higher transfer speeds

Best-Fit Applications

- Store or back up photos, movies, music and documents.
- Download and save content that's posted on your social networks.
- Share your digital memories to your social networks with a click.

CAPACITY ¹	KIT NUMBER ²	INTERFACE	COLOR	OS
1TB	STBU1000100	USB 3.0	● Black	PC, Mac
1TB	STBU1000101	USB 3.0	● Silver	PC, Mac
1TB	STBU1000102	USB 3.0	● Blue	PC, Mac
1TB	STBU1000103	USB 3.0	● Red	PC, Mac
750GB	STBU750100	USB 3.0	● Black	PC, Mac
500GB	STBU500100	USB 3.0	● Black	PC, Mac
500GB	STBU500101	USB 3.0	● Silver	PC, Mac
500GB	STBU500102	USB 3.0	● Blue	PC, Mac
500GB	STBU500103	USB 3.0	● Red	PC, Mac
PRODUCT DIMENSIONS	4.86-in L x 3.19-in W x 0.57-in D (123.4mm x 81.1mm x 14.5mm)			
PACKAGE DIMENSIONS	5.2-in L x 1.81-in W x 6.54-in D (132mm x 46mm x 166mm)			



¹ One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.

² U.S. model numbers shown

Backup Plus for Mac

The Backup Plus portable drive for Mac is the simple way to protect and share your entire digital life.

Key Advantages

- Mac OS and Time-Machine ready out of the box
- Automatically saves photos from social networks
- Share photos and video to social networks with a click.
- Easily increase transfer speeds by upgrading to Thunderbolt technology.

Best-Fit Applications

- Store or back up photos, movies, music and documents.
- Download and save content that's posted on your social networks.
- Share your digital memories to your social networks with a click.



CAPACITY ¹	KIT NUMBER ²	INTERFACE	COLOR	OS
1TB	STBW1000301	USB 3.0	● Silver/ ○ White	Mac, PC
500GB	STBW500301	USB 3.0	● Silver/ ○ White	Mac, PC
PRODUCT DIMENSIONS	4.86-in L x 3.19-in W x 0.57-in D (123.4mm x 81.1mm x 14.5mm)			
PACKAGE DIMENSIONS	5.2-in L x 1.81-in W x 6.54-in D (132mm x 46mm x 166mm)			

Thunderbolt™ Backup Plus for Mac Portable

The Thunderbolt Backup Plus for Mac portable drive is everything you need to transfer, store and back up files using Thunderbolt technology.

Key Advantages

- Includes Thunderbolt cable, adapter and drive
- Compatible with Time Machine software
- Compatible with Thunderbolt devices
- No external power supply required

Best-Fit Applications

- Combine high-speed data transfer and high-definition display in a single interface
- Unleash your creativity using high-bandwidth media-capturing devices while processing in real time
- Handle vast amounts of data more precisely than with any other connection
- Back up and restore data at 10Gps



CAPACITY ¹	KIT NUMBER ²	INTERFACE	COLOR	OS
1TB	STBW1000401	Thunderbolt	● Black	Mac, PC
PRODUCT DIMENSIONS	5.12-in L x 3.19-in W x 1.09-in D (130mm x 81mm x 27.8mm)			
PACKAGE DIMENSIONS	6.69-in L x 5.24-in W x 1.81-in D (170mm x 133mm x 46mm)			

Backup Plus Desktop for Mac

The Backup Plus desktop drive for Mac is the simple, one-click way to protect and share your entire digital life.

Key Advantages

- Mac OS and Time Machine ready right out of the box
- Automatically saves photos from social networks
- Share photos and video to social networks with a click.
- Up to 3TB capacity for a lifetime of memories

Best-Fit Applications

- Back up all your important files.
- Download and save content that's posted on your social networks.
- Share your digital memories to your social networks with a click.



CAPACITY ¹	KIT NUMBER ²	INTERFACE	COLOR	OS
3TB	STCB3000900	FireWire 800/ USB 3.0	● Black/ ● Silver	Mac, PC
2TB	STCB2000900	FireWire 800/ USB 3.0	● Black/ ● Silver	Mac, PC
PRODUCT DIMENSIONS	6.22-in L x 4.88-in W x 1.73-in D (158mm x 124mm x 44mm)		●	
PACKAGE DIMENSIONS	7.87-in L x 9.06-in W x 3.54-in D (200mm x 230mm x 90mm)		●	

Thunderbolt Backup Plus for Mac Desktop

The Thunderbolt Backup Plus for Mac desktop drive is everything you need to transfer, store and back up files using Thunderbolt technology.

Key Advantages

- Includes Thunderbolt cable, adapter and drive
- Dual ports enable daisy-chaining up to six devices
- Compatible with Thunderbolt displays and other devices
- Compatible with Time Machine softwares

Best-Fit Applications

- Combine high-speed data transfer and high-definition display in a single interface
- Unleash your creativity using high-bandwidth media-capturing devices while processing in real time
- Handle vast amounts of data more precisely than with any other connection
- Back up and restore data at 10Gbps



CAPACITY ¹	KIT NUMBER ²	INTERFACE	COLOR	OS
3TB	STCB3000400	Thunderbolt	● Black	Mac, PC
PRODUCT DIMENSIONS	6.61-in L x 4.76-in W x 2.42-in D (168mm x 120.9mm x 61.4mm)			
PACKAGE DIMENSIONS	8.64-in L x 9.13-in W x 3.5-in D (219.5mm x 232mm x 89mm)			

¹ One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.
² U.S. model numbers shown

Backup Plus Desktop

The Backup Plus desktop drive is the simple, one-click way to protect and share your entire digital life.

Key Advantages

- Easy, flexible, built-in backup options
- Automatically saves photos from social networks
- Photos and videos can be shared to social networks with a click.
- Up to 4TB capacity for a lifetime of memories
- Increase transfer speeds by upgrading to Thunderbolt technology or FireWire 800.

Best-Fit Applications

- Back up all your important files.
- Download and save content that's posted on your social networks.
- Share your digital memories to your social networks with a click.



CAPACITY ¹	KIT NUMBER ²	INTERFACE	COLOR	OS
4TB	STCA4000100	USB 3.0	● Black	PC, Mac
3TB	STCA3000100	USB 3.0	● Black	PC, Mac
2TB	STCA2000100	USB 3.0	● Black	PC, Mac
1TB	STCA1000100	USB 3.0	● Black	PC, Mac
PRODUCT DIMENSIONS	6.22-in L x 4.88-in W x 1.73-in D (158mm x 124mm x 44mm)			
PACKAGE DIMENSIONS	7.87-in L x 9.06-in W x 3.54-in D (200mm x 230mm x 90mm)			

Slim Portable for Mac

The Seagate Slim portable drive for Mac combines our thinnest, sleekest form factor in a Time Machine-ready drive.

Key Advantages

- World's slimmest portable external hard drive
- Mac OS and Time Machine ready out of the box
- Automatically saves photos from social networks
- Photos and videos can be shared to social networks with a click.

Best-Fit Applications

- Store or back up photos, movies, music and documents.
- Download and save content that's posted on your social networks.
- Share your digital memories to your social networks with a click.



CAPACITY ¹	KIT NUMBER ²	INTERFACE	COLOR	OS
500GB	STCF500400	USB 3.0	● Black	Mac, PC
PRODUCT DIMENSIONS	4.91-in L x 3.07-in W x 0.35-in D (124.8mm x 78mm x 9mm)			
PACKAGE DIMENSIONS	5.2-in L x 1.81-in W x 6.52-in D (132mm x 46mm x 165.5mm)			

Slim Portable

The Seagate Slim portable drive is our thinnest, sleekest way yet to back up the things that are important to you.

Key Advantages

- World's slimmest portable external hard drive
- Protects your stuff with easy, flexible backups
- Automatically saves photos from social networks
- Photos and videos can be shared to social networks with a click.

Best-Fit Applications

- Store or back up photos, movies, music and documents.
- Download and save content that's posted on your social networks.
- Share your digital memories to your social networks with a click.



CAPACITY ¹	KIT NUMBER ²	INTERFACE	COLOR	OS
500GB	STCD500100	USB 3.0	● Black	PC, Mac
PRODUCT DIMENSIONS	4.91-in L x 3.07-in W x 0.35-in D (124.8mm x 78mm x 9mm)			
PACKAGE DIMENSIONS	5.2-in L x 1.81-in W x 6.52-in D (132mm x 46mm x 165.5mm)			

Expansion™ Desktop

The Expansion desktop drive provides extra storage for your ever-growing collection of files.

Key Advantages

- Simple and straightforward setup
- No software to install and nothing to configure
- Saving files is easy—simply drag and drop.
- USB 3.0 interface allows fast transfer speeds.

Best-Fit Applications

- Instantly add more storage space to your computer.
- Improve performance on your computer's internal drive by freeing up space on your internal drive.



CAPACITY ¹	KIT NUMBER ²	INTERFACE	COLOR	OS
3TB	STBV3000100	USB 3.0	● Black	PC
2TB	STBV2000100	USB 3.0	● Black	PC
1TB	STBV1000100	USB 3.0	● Black	PC
PRODUCT DIMENSIONS	7.07-in L x 4.65-in W x 1.48-in D (179.5mm x 118mm x 37.5mm)			
PACKAGE DIMENSIONS	9.09-in L x 7.97-in W x 2.83-in D (231mm x 202mm x 72mm)			

¹ One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.

² U.S. model numbers shown

Expansion™ Portable

The Expansion portable drive is compact and perfect for taking large files with you on-the-go.

Key Advantages

- Simple and straightforward setup
- Powered from the USB cable
- Saving files is easy—simply drag and drop.
- USB 3.0 interface allows fast transfer speeds.

Best-Fit Applications

- Instantly add more storage space to your computer.
- Take large files with you when you travel.



CAPACITY ¹	KIT NUMBER ²	INTERFACE	COLOR	OS
1TB	STBX1000101	USB 3.0	● Black	PC
750GB	STBX750100	USB 3.0	● Black	PC
500GB	STBX500100	USB 3.0	● Black	PC
PRODUCT DIMENSIONS (1TB)	5.04-in L x 3.51-in W x 0.87-in D (128.1mm x 89.1mm x 22mm)			
PRODUCT DIMENSIONS (500GB)	4.81-in L x 3.19-in W x 0.61-in D (122.3mm x 81.1mm x 15.5mm)			

GoFlex Satellite™

With GoFlex Satellite mobile wireless storage, you can take your media library with you. Stream it to your iPad or Android tablet.

Key Advantages

- Take your media library with you on the go
- Stream media with up to 3 Wi-Fi enabled devices at the same time
- Automatically sync media and documents from your PC or Mac computer
- Up to 5 hours battery life³

Best-Fit Applications

- Store and carry movies and other media on the go.
- Share media with others.
- Works with iPad or Android tablet



CAPACITY ¹	KIT NUMBER ²	INTERFACE	COLOR	OS
500GB	STBF500101	USB 3.0	● Black	PC, Mac
PRODUCT DIMENSIONS	4.72-in L x 3.54-in W x 0.87-in D (120mm x 90mm x 22mm)			
PACKAGE DIMENSIONS	6.30-in L x 6.69-in W x 2.13-in D (160mm x 170mm x 54mm)			

GoFlex[®] Home

The GoFlex Home network storage system allows you to create secure in-home cloud storage for multiple computers in the home.

Key Advantages

- Connects to your WiFi router
- Simple setup in just minutes
- Automatic and continuous backup
- Easily update storage capacity or plug in external drives—no tools required.

Best-Fit Applications

- Back up multiple home PC and Mac computers.
- Store files in a central location.
- Access files from computers and mobile devices over the Internet.
- Stream media to game consoles and media players.
- Share a USB printer with all computers in the home.



CAPACITY ¹	KIT NUMBER ²	INTERFACE	COLOR	OS
3TB	STAM3000100	SATA/GigE	Black	PC, Mac
2TB	STAM2000100	SATA/GigE	Black	PC, Mac
1TB	STAM1000100	SATA/GigE	Black	PC, Mac
PRODUCT DIMENSIONS	3.13-in L x 5.31-in W x 6.75-in D (80mm x 135mm x 171mm)			
PACKAGE DIMENSIONS	10.04-in L x 3.07-in W x 7.64-in D (255mm x 78mm x 194mm)			



¹ One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.
² U.S. model numbers shown.
³ Exact battery life subject to product model, normal usage conditions and configurations.

BlackArmor® NAS 440/400

A complete, small-business-specific network storage solution designed to provide optimum uptime and data integrity for up to 50 workstations

Key Advantages

- BlackArmor NAS 440 models include four drives to increase capacity and take advantage of RAID 5/10 options.
- BlackArmor NAS 400 model available without pre-installed drives for maximum flexibility.
- Designed for small business to provide optimum uptime and data integrity
- User-configurable RAID 0/1/5/10 and JBOD
- Continuous and automatic full-system backup for network connected workstations³
- Hot-swappable, user-serviceable drives — no tools required

Best-Fit Applications

- Store and access files from a central, secure location.
- Access and manage files remotely.
- Back up or move files to a secondary storage device.
- Automatically perform full-system backups on network-connect PCs.
- Share a USB printer with network-connected PCs and Macs.
- Encrypt individual files to entire volumes of data.
- Stream media with DLNA or iTunes.



CAPACITY ¹	KIT NUMBER ²	INTERFACE	COLOR	OS
12TB	STAU12000100	Gigabit Ethernet	● Black	PC, Mac
8TB	ST380005SHA10G-RK	Gigabit Ethernet	● Black	PC, Mac
4TB	ST340005SHA10G-RK	Gigabit Ethernet	● Black	PC, Mac
—	STAR401	Gigabit Ethernet	Black	PC, Mac
PRODUCT DIMENSIONS	6.30-in W x 8.15-in H x 10.59-in D (160.00mm x 207.00mm x 269.00mm)			
PACKAGE DIMENSIONS	9.29-in W x 9.50-in H x 14.37-in D (236.00mm x 241.30mm x 365.00mm)			

BlackArmor® NAS 220

A small-business-specific network attached storage solution designed for centralized storage and data backup for up to 20 PCs

Key Advantages

- Automatic data mirroring with RAID 1
- Protect network-connected PCs with incremental and full-system, automatic backup³
- Functions as FTP server for remote access
- Includes two reliable, user-replaceable drives
- Secure files with hardware-based encryption.

Best-Fit Applications

- Central, secure file storage and access
- Access and manage files remotely.
- Share a printer with connected PCs and Macs.










CAPACITY ¹	KIT NUMBER ²	INTERFACE	COLOR	OS
6TB	STAV6000100	Gigabit Ethernet	● Black	PC, Mac
4TB	ST340005LSA10G-RK	Gigabit Ethernet	● Black	PC, Mac
2TB	ST320005LSA10G-RK	Gigabit Ethernet	● Black	PC, Mac
PRODUCT DIMENSIONS	4.09-in W x 7.79-in H x 7.40-in D (104.00mm x 197.80mm x 188.00mm)			
PACKAGE DIMENSIONS	10.90-in W x 6.13-in H x 11.00-in D (276.86mm x 155.70mm x 279.40mm)			

¹ One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to hard drive capacity.
² U.S. model numbers shown
³ Includes 10 software licenses; additional licenses available at www.seagate.com.

Internal Storage

At-a-Glance Product Comparison

	DESKTOP	ENTERPRISE		
3.5-inch				
	Barracuda®	Cheetah® 15K	Constellation® ES.3	Constellation ES.2
BUSINESS NEED	Mainstream	Performance	Mainstream	
USE THIS DRIVE FOR	Desktop compute where choice in capacity and cache options to provide design flexibility is important	High-capacity, compute-intensive requirements demanding high performance and availability	Bulk-data applications requiring reliable, highest-capacity storage, efficiency and enterprise-class reliability	
ENCRYPTION MODELS AVAILABLE		X	X	X
LEARN MORE	Page 18	Page 29	Page 30	Page 31

	LAPTOP		
2.5-inch			
	Momentus® XT	Momentus	Momentus Thin
BUSINESS NEED	Performance	Mainstream	Thin (7mm z-hgt.)
USE THIS DRIVE FOR	The ultimate mobile computing experience, with SSD-like performance for all applications and OS environments	Laptop PCs where the lowest power consumption, silent acoustics and the highest quality is always expected	Slim computing devices such as thin laptops and netbooks, where z-height makes all the difference
ENCRYPTION MODELS AVAILABLE		X	X
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ENTERPRISE		VIDEO STORAGE	
			
Constellation ES	Constellation CS	SV35 Series™	Pipeline® HD
Mainstream	Low Power	Surveillance	DVR
Maximum-capacity enterprise servers and storage arrays requiring enterprise-class reliability		Surveillance systems that require high performance, low-power, ruggedized and centralized storage for every surveillance application	
Cost-effective, low-power bulk storage solutions for unstructured data in clouds		DVR systems where reliable, low-power, purpose-built storage is required for video streaming applications	
X			
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ENTERPRISE			ENTERPRISE SSD
			
Savvio® 15K	Savvio 10K	Constellation.2™	Pulsar.2™
Performance	Mainstream	Low Power	Mainstream
Compute-intensive data requirements demanding the highest performance density and availability		Enterprise environments requiring MLC-enabled, high-capacity SSD with data integrity and drive endurance	
Mainstream data requiring high capacity, performance density and reliability		Online reference data demands requiring cost-effective, low-power, enterprise-class drives	
X		X	
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Page 28		Page 32	

Desktop Storage Solutions

Seagate has a distinguished history in consistently delivering innovative technologies, super-sized capacities, low power and blazing-fast performance. Seagate desktop drives offer excellent performance at all levels.



Product Comparison



	BARRACUDA® 3.5-INCH INTERNAL KIT	BARRACUDA
Application	Mainstream	Mainstream and Performance
Description	The fast, powerful and easy way to upgrade or add storage capacity to desktop computers	Tuned performance for low-power, mainstream and high-performance desktop computing
Form Factor	3.5 inch	3.5 inch
Performance	7200 RPM	7200 RPM
Reliability (AFR)	<1%	<1%
Max. Ext. Transfer Rate	300MB/s to 600MB/s	600MB/s
Capacity¹	500GB to 3TB	250GB to 3TB
Interface	SATA 3Gb/s, SATA 6Gb/s	SATA 6Gb/s
Cache	16MB to 64MB	16MB to 64MB
Power (Idle)		4.60W 3.36W to 5.40W (Idle2)

Feature Comparison



	MAINSTREAM	MAINSTREAM AND PERFORMANCE
Product	Barracuda 3.5-Inch Internal Kit	Barracuda
SATA Interface	X	X
Sustainable Technology	X	X
Best-in-Class Performance		X
Capacity Leadership	X	X
Quiet Acoustics	X	
DiscWizard™ Installation Software	X	X
Compatible with Windows 7²	X	X

¹ One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.

² For a complete list of Seagate products that are compatible with Windows 7, visit: <http://www.microsoft.com/windows/compatibility/windows-7/en-us/Search.aspx?type=Hardware&s=Seagate>

Barracuda®

Seagate Barracuda drives give you the Power of One with 1TB-per-disk technology and one drive platform for every capacity and application.

Key Advantages

- Up to 3TB capacity with 7200-RPM performance
- AcuTrac™ and OptiCache™ technologies deliver dependable overall performance.
- Seagate SmartAlign™ technology provides simple migration to Advanced Format 4K sectors.
- Free Seagate DiscWizard™ software

Best-Fit Applications

- Desktop or all-in-one PCs and home servers
- PC-based gaming systems
- Desktop RAID
- Direct-attached external storage devices (DAS)
- Network-attached storage devices (NAS)



CAPACITY¹	MODEL	INTERFACE	CACHE
3TB	ST3000DM001	SATA 6Gb/s NCQ	64MB
2TB	ST2000DM001	SATA 6Gb/s NCQ	64MB
1TB	ST1000DM003	SATA 6Gb/s NCQ	64MB
500GB	ST500DM002	SATA 6Gb/s NCQ	16MB
320GB	ST320DM000	SATA 6Gb/s NCQ	16MB
250GB	ST250DM000	SATA 6Gb/s NCQ	16MB

Barracuda® 3.5-Inch Internal Kit

Seagate 3.5-inch internal drives are the fast, powerful, and easy way to upgrade or add storage capacity to desktop computers.

Key Advantages

- Quiet, ultra-high performance
- DiscWizard™ software makes installation a snap
- Built-in self-monitoring technology helps ensure maximum reliability

Best-Fit Applications

- Gaming PCs
- Workstations
- High-end PCs
- Desktop RAID
- Mainstream/office PCs



CAPACITY ¹	KIT NUMBER ²	RPM	INTERFACE
3TB	STBD3000100	7200	SATA 6Gb/s
2TB	STBD2000101	7200	SATA 6Gb/s
1TB	ST310005N1A1AS-RK	7200	SATA 6Gb/s
500GB	ST3500641AS-RK	7200	SATA 3Gb/s
PACKAGE DIMENSIONS	7.38-in L x 5.88-in W x 2.88-in D (187mm x 149mm x 73mm)		

¹ One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.
² U.S. model numbers shown

Laptop Storage Solutions

Seagate laptop drives address every mobile market need, delivering superior performance, reliability and value. Feature-rich with innovative options, the Seagate laptop lineup also includes self-encryption and FIPS 140-2 validated models.



Product Comparison



	MOMENTUS® 2.5-INCH INTERNAL KIT	MOMENTUS XT	MOMENTUS	MOMENTUS THIN
Application	Mainstream and Performance	Extreme Performance	Mainstream	Slim Computing
Description	A complete upgrade kit to transform your system to high performance or just add capacity	Solid state hybrid drives deliver SSD-like performance without sacrificing capacity	The best combination of capacity, mobility and durability in a laptop hard drive	The world's thinnest 2.5-inch drive for slim laptops and netbooks
Form Factor	2.5 inch	2.5 inch	2.5 inch	7mm, 2.5 inch
Performance	5400 RPM to 7200 RPM	7200 RPM	5400 RPM to 7200 RPM	5400 RPM to 7200 RPM
Reliability (AFR)	0.40% to 0.50%	0.50%	0.48%	0.48%
Max. Ext. Transfer Rate	300MB/s to 600MB/s	300MB/s to 600MB/s	300MB/s	300MB/s
Capacity¹	250GB to 1TB	500GB to 750GB	250GB to 750GB	250GB and 300GB
Interface	SATA 6Gb/s	SATA 3Gb/s, SATA 6Gb/s	SATA 3Gb/s	SATA 3Gb/s
Cache	8MB to 32MB	32MB	8MB to 16MB	16MB
Power (Idle)		0.8W to 1.1W	0.67W to 0.81W	0.45W to 0.66W

Feature Comparison



	MAINSTREAM AND PERFORMANCE	EXTREME PERFORMANCE	MAINSTREAM	SLIM COMPUTING
Product	Momentus 2.5-Inch Internal Kit	Momentus XT	Momentus	Momentus Thin
SATA Interface	X	X	X	X
Lowest Acoustics			X	X
Lowest Power			X	X
Self-Encrypting Drive			X	X
Drop Sensor Options			X	
Solid State Hybrid	X	X		
Compatible with Windows 7²	X	X	X	X

¹ One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.

² For a complete list of Seagate products that are compatible with Windows 7, visit: <http://www.microsoft.com/windows/compatibility/windows-7/en-us/Search.aspx?type=Hardware&s=Seagate>

Momentus® XT

The Seagate Momentus XT solid state hybrid drive enables laptop PC users to enjoy solid state performance without sacrificing capacity.

Key Advantages

- Boots and performs like an SSD⁷
- Up to 3x faster than a traditional HDD⁷
- SATA 6Gb/s with NCQ for interface speed
- All-in-one design for simplicity and ease of installation
- Works in any laptop or PC, any OS and any application
- Backed by a 3-year limited warranty

Best-Fit Applications

- Laptops and mobile workstations
- Desktop and tower workstations
- High-performance laptop and desktop gaming systems
- Small form factor all-in-one PCs



CAPACITY ¹	MODEL	INTERFACE	CACHE
750GB	ST750LX003	SATA 6Gb/s	32MB
500GB	ST95005620AS	SATA 3Gb/s	32MB

Momentum®

The Seagate Momentum drive offers the world's most feature-rich 2.5-inch family of storage for laptops and external enclosures.

Key Advantages

- Innovative options and features—the power to transform from ordinary to extraordinary
- 7200 RPM delivers a constant high-performance boost.
- 5400 RPM enables affordable, low-power and high-capacity drives for external enclosures.
- Self-Encrypting Drive options mitigate data breaches, comply with data protection regulations and preserve brand recognition.
- Self-Encrypting Drive options with FIPS 140-2 certification⁴ are government-approved for the U.S. and Canadian governments.
- G-Force Protection™ technology can help keep your data recoverable after a fall, even if your laptop doesn't survive.
- Seagate Smartalign™ technology provides a transition to 4K sectors without the need for software utilities.

Best-Fit Applications

- Mainstream and high-performance laptops
- External storage solutions, boxes
- Industrial applications requiring a small form factor



CAPACITY ¹	7200-RPM MODEL	INTERFACE	CACHE
750GB	ST9750420AS ³	SATA 3Gb/s	16MB
500GB	ST9500423AS ³	SATA 3Gb/s	16MB
500GB	ST9500420ASG ²	SATA 3Gb/s	16MB
500GB	ST9500421AS ⁵	SATA 3Gb/s	16MB
500GB	ST9500422AS ⁶	SATA 3Gb/s	16MB
320GB	ST9320423AS	SATA 3Gb/s	16MB
320GB	ST320LT023 ^{3,4}	SATA 3Gb/s	16MB
250GB	ST9250410AS	SATA 3Gb/s	16MB
250GB	ST250LT021 ^{3,4}	SATA 3Gb/s	16MB
250GB	ST9250410ASG ²	SATA 3Gb/s	16MB
250GB	ST9250411AS ⁵	SATA 3Gb/s	16MB
250GB	ST9250412AS ^{3,6}	SATA 3Gb/s	16MB

CAPACITY ¹	5400-RPM MODEL	INTERFACE	CACHE
500GB	ST9500325AS	SATA 3Gb/s	8MB
500GB	ST9500325ASG ²	SATA 3Gb/s	8MB
500GB	ST9500327AS ⁵	SATA 3Gb/s	8MB
320GB	ST9320325AS	SATA 3Gb/s	8MB
320GB	ST320LT022 ^{3,4}	SATA 3Gb/s	16MB
250GB	ST9250315AS	SATA 3Gb/s	8MB
250GB	ST250LT020 ^{3,4}	SATA 3Gb/s	16MB
250GB	ST9250317AS ⁵	SATA 3Gb/s	8MB

¹ One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.

² Drive with G-Force Protection™ feature

³ Advanced Format (4K) drive with SmartAlign™ technology resolves misalignment conditions.

⁴ 7mm z-height expanded to 9.5mm enables compatibility with standard laptop chassis.

⁵ Self-Encrypting Drive model

⁶ See FIPS 140-2 Level 2 Certificate at <http://csrc.nist.gov/groups/STM/cmvp/documents/140-1/1401vend.htm>.

⁷ Performance may vary depending on user's hardware configuration and operating system. Testing performed on a Momentum XT 750GB SSHD.

Momentum® Thin

The 7mm, 2.5-inch drive enables slim computing for all types of mobile computing, from laptops to netbooks to smaller desktop PCs.

Key Advantages

- 7mm z-height form factor enables thin chassis design for all segments of laptop computing.
- Seagate SmartAlign™ technology provides a transition to 4K sectors without the need for software utilities.
- Self-Encrypting Drive options mitigate data breaches, comply with data protection regulations and preserve brand recognition.
- Self-Encrypting Drive options with FIPS 140-2 certification³ are government-approved for the U.S. and Canadian governments.

Best-Fit Applications

- Thin entry-level laptop PCs
- Thin high-end netbooks
- Thin ultraportables
- Slim CE devices



CAPACITY ¹	7200-RPM MODEL	INTERFACE	CACHE
320GB	ST320LT007	SATA 3Gb/s	16MB
320GB	ST320LT014 ²	SATA 3Gb/s	16MB
320GB	ST320LT009 ^{2,3}	SATA 3Gb/s	16MB
250GB	ST250LT007	SATA 3Gb/s	16MB
250GB	ST250LT014 ²	SATA 3Gb/s	16MB
250GB	ST250LT009 ^{2,3}	SATA 3Gb/s	16MB

CAPACITY ¹	5400-RPM MODEL	INTERFACE	CACHE
500GB	ST500LT025 ^{2,4}	SATA 3Gb/s	16MB
500GB	ST500LT015 ^{3,4}	SATA 3Gb/s	16MB
500GB	ST500LT012	SATA 3Gb/s	16MB
320GB	ST320LT020	SATA 3Gb/s	16MB
320GB	ST320LT012 ⁴	SATA 3Gb/s	16MB
250GB	ST250LT003	SATA 3Gb/s	16MB
250GB	ST250LT012 ⁴	SATA 3Gb/s	16MB

Momentus® 2.5-Inch Internal Kit

Seagate 2.5-inch internal drives deliver vast amounts of storage for adding capacity or upgrading drives in laptop computers.

Key Advantages

- Built for mobility
- Preserves battery life
- Large data cache
- Outstanding performance
- Momentus XT solid state hybrid model offers SSD-like performance with the capacity of a hard drive.

Best-Fit Applications

- Replacement laptop drives
- Laptop storage upgrades
- High-end laptops and workstations



CAPACITY ¹	KIT NUMBER ⁵	RPM	INTERFACE
1TB	STBD1000100	5400	SATA 3Gb/s
500GB	ST905003N3A1AS-RK	7200	SATA 3Gb/s
500GB	ST905003N1A1AS-RK	5400	SATA 3Gb/s
250GB	ST90250N1A1AS-RK	5400	SATA 3Gb/s

PACKAGE DIMENSIONS	6.25-in L x 4.75-in W x 2.25-in D (159mm x 121mm x 57mm)
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MOMENTUS XT MODEL			
750GB	STBD750100	7200	SATA 6Gb/s

PACKAGE DIMENSIONS	6.25-in L x 4.75-in W x 2.25-in D (159mm x 121mm x 57mm)
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¹ One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.
² Self-Encrypting Drive models may require TCG-compliant host or controller support.
³ See FIPS 140-2 Level 2 Certificate at <http://csrc.nist.gov/groups/STM/cmvp/documents/140-1/1401vend.htm>.
⁴ SmartAlign technology is not available on this model.
⁵ U.S. model numbers shown

Enterprise Storage Solutions

Seagate has the enterprise storage expertise as well as the global presence, processes and resources to consistently support small or medium businesses and run a large data center with the industry's highest-quality enterprise storage products, including FIPS 140-2 validated models.



Product Comparison



	SAVVIO®	CHEETAH®	CONSTELLATION®	PULSAR®
Application	SFF Performance and Mainstream	LFF Performance	High Capacity and Low Power	Mainstream SSD
Description	Highest-performing, highly reliable 15K- and 10K-RPM enterprise hard drives in a 2.5-inch form factor	Highest-performing, highly reliable 15K-RPM enterprise hard drives in a 3.5-inch form factor	High-capacity, lowest-power, reliable 7200-RPM enterprise hard drive in both 2.5- and 3.5-inch form factors	Performance, data integrity and drive endurance in an enterprise solid state drive
Form Factor	2.5-inch	3.5-inch	2.5-inch and 3.5-inch	2.5-inch
Performance	15K RPM and 10K RPM	15K RPM	7200 RPM	MLC and SLC
Reliability (AFR)	0.44%	0.55%	0.62% and 1.1%	0.44%
Capacity¹	300GB to 900GB	300GB to 600GB	250GB to 3TB	100GB to 800GB
Power (Idle)	3.0W to 4.4W	8.74W to 11.68W	2.52W to 7.7W	3.47W to 5.92W
Interface	6Gb/s SAS, 4Gb/s FC	6Gb/s SAS, 4Gb/s FC	6Gb/s SAS, SATA 6Gb/s	6Gb/s SAS, SATA 6Gb/s
Limited Warranty⁴	5 years	5 years	3 years and 5 years	5 years

Feature Comparison



	2.5-Inch Mission Critical		3.5-Inch Mission Critical	2.5-Inch Nearline	3.5-Inch Nearline	Mainstream SSD
Product	Savvio 15K	Savvio 10K	Cheetah 15K	Constellation	Constellation ES Constellation CS	Pulsar.2
Best-in-Class Performance	X	X	X	X	X	
Capacity Leadership		X	X		X	X
Vibration Tolerance for Multi-Drive Stabilization	X	X	X	X	X	
6Gb/s SAS Interface	X	X	X	X	X	X
4Gb/s FC Interface		X	X			
6Gb/s SATA Interface				X	X	X
Best-in-Class Power Usage		X		X	X	
PowerChoice™ Optimized Idle Power Settings		X		X	X	
Self-Encrypting Drive (SED) ²	X	X	X	X	X	X
FIPS 140-2 SED ^{2,3}	X	X	X	X	X	

¹ One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.

² Self-Encrypting Drive models may require TCG-compliant host or controller support.

³ See FIPS 140-2 Level 2 Certificate at <http://csrc.nist.gov/groups/STM/cmvp/documents/140-1/1401vend.htm>.

⁴ Warranty terms may vary based on usage. Consult your Seagate sales representative for warranty terms and conditions.

Savvio® 10K

Seagate Savvio 10K drives deliver the optimal balance of capacity, performance and power in a 10K-RPM, 2.5-inch enterprise drive.

Key Advantages

- Highest-capacity enterprise SFF hard drive (up to 900GB)
- PowerChoice™ technology reduces power consumption.
- First SFF 10K-RPM drive to support 4Gb/s FC
- Protection Information (PI) option detects corruption of data in flight between the host system and the drive⁵
- Self-Encrypting Drive (SED)² and FIPS 140-2 certified SED³ cut IT drive retirement costs and protect data. FIPS options meet government encryption compliance standards.

Best-Fit Applications

- Mission-critical servers and external storage arrays
- Power- and space-constrained data centers
- Compliance or data security initiatives



CAPACITY ¹	MODEL	INTERFACE	CACHE
900GB	ST900MM0026 ²	6Gb/s SAS	64MB
900GB	ST900MM0036 ^{2,4}	6Gb/s SAS	64MB
900GB	ST9900805SS	6Gb/s SAS	64MB
900GB	ST9900705SS ²	6Gb/s SAS	64MB
900GB	ST9900605SS ^{2,3}	6Gb/s SAS	64MB
900GB	ST9900805FC	4Gb/s FC	64MB
600GB	ST600MM0026 ²	6Gb/s SAS	64MB
600GB	ST9600205SS	6Gb/s SAS	64MB
600GB	ST9600105SS ²	6Gb/s SAS	64MB
600GB	ST9600005SS ^{2,3}	6Gb/s SAS	64MB
600GB	ST9600205FC	4Gb/s FC	64MB
450GB	ST450MM0026 ²	6Gb/s SAS	64MB
450GB	ST9450405SS	6Gb/s SAS	64MB
450GB	ST9450305SS ²	6Gb/s SAS	64MB
450GB	ST9450205SS ^{2,3}	6Gb/s SAS	64MB
450GB	ST9450405FC	4Gb/s FC	64MB
300GB	ST300MM0026 ²	6Gb/s SAS	64MB
300GB	ST9300605SS	6Gb/s SAS	64MB
300GB	ST9300505SS ²	6Gb/s SAS	64MB
300GB	ST9300405SS ^{2,3}	6Gb/s SAS	64MB
300GB	ST9300605FC	4Gb/s FC	64MB

Savvio® 15K

The 2.5-inch Seagate Savvio 15K hard drive provides the world's highest performance and reliability while delivering ultra-low power consumption.

Key Advantages

- Stores twice the amount of Tier 1 data without increasing drive count
- Enables Tier 1 applications to process transactions more quickly
- Reduces system complexity and operating costs
- Self-Encrypting Drive (SED)² and FIPS 140-2 certified SED³ cut IT drive retirement costs and protect data. FIPS options meet government encryption compliance standards.

Best-Fit Applications

- High-performance enterprise servers and storage arrays
- Transaction-intensive database applications
- Blade, rack and tower servers
- Security compliance-driven IT organizations



CAPACITY ¹	MODEL	INTERFACE	CACHE
300GB	ST9300653SS	6Gb/s SAS	64MB
300GB	ST9300553SS ²	6Gb/s SAS	64MB
300GB	ST9300453SS ^{2,3}	6Gb/s SAS	64MB
146GB	ST9146853SS	6Gb/s SAS	64MB
146GB	ST9146753SS ²	6Gb/s SAS	64MB
146GB	ST9146653SS ^{2,3}	6Gb/s SAS	64MB
146GB	ST9146852SS	6Gb/s SAS	16MB
146GB	ST9146752SS ²	6Gb/s SAS	16MB
146GB	ST9146652SS ^{2,3}	6Gb/s SAS	16MB
73GB	ST973452SS	6Gb/s SAS	16MB
73GB	ST973352SS ²	6Gb/s SAS	16MB
73GB	ST973252SS ^{2,3}	6Gb/s SAS	16MB

Cheetah® 15K

The Seagate Cheetah 15K drive provides the highest capacity, performance and reliability in 3.5-inch mission-critical storage.

Key Advantages

- Third-generation perpendicular recording
- Sustained data rate of up to 204MB/s
- Industry's highest 3.5-inch drive reliability
- Powertrim™ technology optimizes power consumption
- Self-Encrypting Drive (SED)² and FIPS 140-2 certified SED³ cut IT drive retirement costs and protect data. FIPS options meet government encryption compliance standards.

Best-Fit Applications

- Business and transaction processing
- Email and decision support
- Storage Area Networks (SAN)
- Network Attached Storage (NAS)
- Internet and e-commerce



CAPACITY ¹	MODEL	INTERFACE	CACHE
600GB	ST3600057SS	6Gb/s SAS	16MB
600GB	ST3600957SS ²	6Gb/s SAS	16MB
600GB	ST3600857SS ^{2,3}	6Gb/s SAS	16MB
600GB	ST3600057FC	4Gb/s FC	16MB
450GB	ST3450857SS	6Gb/s SAS	16MB
450GB	ST3450757SS ²	6Gb/s SAS	16MB
450GB	ST3450657SS ^{2,3}	6Gb/s SAS	16MB
450GB	ST3450857FC	4Gb/s FC	16MB
300GB	ST3300657SS	6Gb/s SAS	16MB
300GB	ST3300557SS ²	6Gb/s SAS	16MB
300GB	ST3300457SS ^{2,3}	6Gb/s SAS	16MB
300GB	ST3300657FC	4Gb/s FC	16MB

¹ One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.

² Self-Encrypting Drive models may require TCG-compliant host or controller support.

³ See FIPS 140-2 Level 2 Certificate at <http://csrc.nist.gov/groups/STM/cmvp/documents/140-1/1401vend.htm>.

⁴ FIPS 140-2 in review. See FIPS 140-2 Level 2 Certificate at <http://csrc.nist.gov/groups/STM/cmvp/validation.html#05>

⁵ Protection Information (PI) feature requires PI-compliant host or controller support.

Constellation® ES.3

The Seagate Constellation ES.3 enterprise capacity HDD helps data centers meet the demanding growth of unstructured data.

Key Advantages

- Highest-capacity enterprise drive for maximum density server and storage solutions
- SAS and SATA interfaces with 24x7 reliability
- Predictable 7200-RPM performance even in the most rugged multi-drive environments
- Improved power and cooling efficiencies with low power consumption and on-demand PowerChoice™ technology
- Protect your data and ease data disposal costs and management with the SED FIPS 140-2 option.^{4,5}

Best-Fit Applications

- High-capacity RAID storage
- Mainstream enterprise external storage (SAN, NAS, DAS)
- Cloud bulk data storage
- Enterprise backup and restore—D2D, virtual tape
- Centralized surveillance



CAPACITY ¹	MODEL	INTERFACE	CACHE
4TB	ST4000NM0033	SATA 6Gb/s	128MB
4TB	ST4000NM0053 ⁴	SATA 6Gb/s	128MB
4TB	ST4000NM0023	6Gb/s SAS	128MB
4TB	ST4000NM0043 ⁴	6Gb/s SAS	128MB
4TB	ST4000NM0063 ^{4,5}	6Gb/s SAS	128MB
3TB	ST3000NM0033	SATA 6Gb/s	128MB
3TB	ST3000NM0053 ⁴	SATA 6Gb/s	128MB
3TB	ST3000NM0023	6Gb/s SAS	128MB
3TB	ST3000NM0043 ⁴	6Gb/s SAS	128MB
3TB	ST3000NM0063 ^{4,5}	6Gb/s SAS	128MB
2TB	ST2000NM0033	SATA 6Gb/s	128MB
2TB	ST2000NM0053 ⁴	SATA 6Gb/s	128MB
2TB	ST2000NM0023	6Gb/s SAS	128MB
2TB	ST2000NM0043 ⁴	6Gb/s SAS	128MB
2TB	ST2000NM0063 ^{4,5}	6Gb/s SAS	128MB
1TB	ST1000NM0033	SATA 6Gb/s	128MB
1TB	ST1000NM0053 ⁴	SATA 6Gb/s	128MB
1TB	ST1000NM0023	6Gb/s SAS	128MB
1TB	ST1000NM0043 ⁴	6Gb/s SAS	128MB
1TB	ST1000NM0063 ^{4,5}	6Gb/s SAS	128MB

Constellation® ES.2

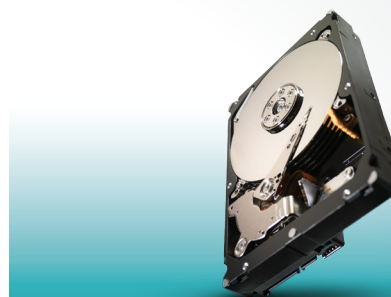
The Seagate Constellation ES.2 drive offers the highest capacities with nearline performance, enterprise-class reliability, high data integrity and data security.

Key Advantages

- Highest-capacity enterprise drive for demanding data growth
- SAS and SATA drives designed for 24x7 reliability
- Best-in-class enhanced rotational vibration tolerance
- Self-Encrypting Drive (SED)² and FIPS 140-2 certified SED³ cut IT drive retirement costs and protect data. FIPS options meet government encryption compliance standards.

Best-Fit Applications

- High-capacity bulk-data storage
- Mainstream enterprise external storage arrays
- Enterprise backup and restore—D2D, virtual tape
- Centralized surveillance
- Cloud storage



CAPACITY ¹	MODEL	INTERFACE	CACHE
3TB	ST33000650NS	SATA 6Gb/s	64MB
3TB	ST33000651NS ²	SATA 6Gb/s	64MB
3TB	ST33000652NS ^{2,3}	SATA 6Gb/s	64MB
3TB	ST33000650SS	6Gb/s SAS	64MB
3TB	ST33000651SS ²	6Gb/s SAS	64MB
3TB	ST33000652SS ^{2,3}	6Gb/s SAS	64MB
2TB	ST32000645NS	SATA 6Gb/s	64MB
2TB	ST32000646NS ²	SATA 6Gb/s	64MB
2TB	ST32000647NS ^{2,3}	SATA 6Gb/s	64MB
2TB	ST32000645SS	6Gb/s SAS	64MB
2TB	ST32000646SS ²	6Gb/s SAS	64MB
2TB	ST32000647SS ^{2,3}	6Gb/s SAS	64MB

Constellation® ES

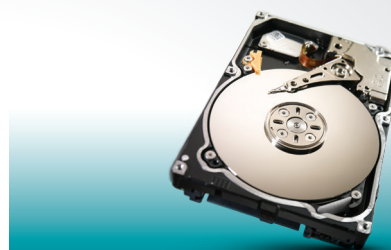
Seagate Constellation ES 3.5-inch hard drives offer the highest capacity at 2TB while providing enterprise robustness for seamless enterprise integration.

Key Advantages

- Enterprise nearline drive designed for 24x7 operation
- Best-in-class rotational vibration tolerance
- Multi-drive firmware maximizes system availability.
- Optimal power savings with PowerChoice™ technology
- Self-Encrypting Drive (SED)² and FIPS 140-2 certified SED³ cut IT drive retirement costs and protect data.
- FIPS options meet government encryption compliance standards.

Best-Fit Applications

- High-capacity data center storage
- Mainstream enterprise external storage arrays
- Enterprise backup and restore
- Cloud storage



CAPACITY ¹	MODEL	INTERFACE	CACHE
2TB	ST2000NM0011	SATA 6Gb/s	64MB
2TB	ST2000NM0031 ²	SATA 6Gb/s	64MB
2TB	ST2000NM0051 ^{2,3}	SATA 6Gb/s	64MB
2TB	ST2000NM0001	6Gb/s SAS	64MB
2TB	ST2000NM0021 ²	6Gb/s SAS	64MB
2TB	ST2000NM0041 ^{2,3}	6Gb/s SAS	64MB
1TB	ST1000NM0011	SATA 6Gb/s	64MB
1TB	ST1000NM0031 ²	SATA 6Gb/s	64MB
1TB	ST1000NM0051 ^{2,3}	SATA 6Gb/s	64MB
1TB	ST1000NM0001	6Gb/s SAS	64MB
1TB	ST1000NM0021 ²	6Gb/s SAS	64MB
1TB	ST1000NM0041 ^{2,3}	6Gb/s SAS	64MB
500GB	ST500NM0011	SATA 6Gb/s	64MB
500GB	ST500NM0031 ²	SATA 6Gb/s	64MB
500GB	ST500NM0051 ^{2,3}	SATA 6Gb/s	64MB
500GB	ST500NM0001	6Gb/s SAS	64MB
500GB	ST500NM0021 ²	6Gb/s SAS	64MB
500GB	ST500NM0041 ^{2,3}	6Gb/s SAS	64MB

¹ One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.

² Seagate Instant Secure Erase Models

³ DDR2 Cache

⁴ Self-Encrypting Drives (SED) and FIPS 140-2 Validated drives are not available in all models or countries. May require TCG-compliant host or controller support.

⁵ FIPS 140-2 in review. See FIPS 140-2 Level 2 Certificate at <http://csrc.nist.gov/groups/STM/cmvp/documents/140-1/1401val2011.htm#1635>

⁶ Based on maximum use of multiple 3.5-inch HDDs in standard 42U 19-inch rack.

Constellation® CS

The Seagate Constellation CS enterprise value hard drive is designed for vast amounts of unstructured data in the cloud..

Key Advantages

- Affordable storage for 24x7 cloud data center replicated environments
- High vibration tolerance for reliable performance
- Save on power and cooling costs with the lowest 3.5-inch enterprise drive operating power.
- Advanced format logical block management
- Lower TCO with Seagate Instant Secure Erase
- Maximize your cloud storage with up to 114TB per square foot.⁶

Best-Fit Applications

- Cloud storage servers and arrays
- Cloud backup storage
- Direct-attached external storage devices (DAS)
- Network-attached storage devices (NAS)



CAPACITY ¹	MODEL	INTERFACE	CACHE
3TB	ST3000NC002	SATA 6Gb/s	64MB ³
3TB	ST3000NC000 ²	SATA 6Gb/s	64MB ³
2TB	ST2000NC001	SATA 6Gb/s	64MB ³
2TB	ST2000NC000 ²	SATA 6Gb/s	64MB ³
1TB	ST1000NC001	SATA 6Gb/s	64MB ³
1TB	ST1000NC000 ²	SATA 6Gb/s	64MB ³

Constellation.2™

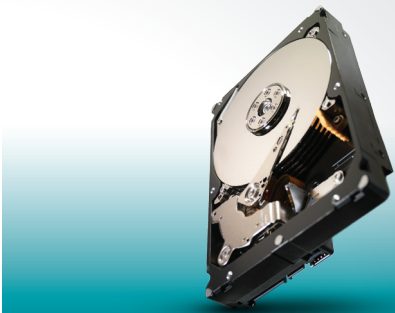
The Seagate Constellation.2 drive is the only 2.5-inch enterprise-class hard drive delivering both 1TB capacities and enterprise reliability.

Key Advantages

- Maximizes data center footprint with up to 76TB/sq.ft.
- Energy-efficient storage at under 3.9W (idle)
- Highest nearline reliability with an MTBF of 1.4M hours
- Self-Encrypting Drive (SED)² and FIPS 140-2 certified SED³ cut IT drive retirement costs and protect data.
- FIPS options meet government encryption compliance standards.

Best-Fit Applications

- Storage-hungry business applications
- Storage area networks and network attached storage
- Maximum-capacity servers and blade servers
- Rich media content storage
- Enterprise backup and restore—D2D, virtual tape
- Cloud computing



CAPACITY ¹	MODEL	INTERFACE	CACHE
1TB	ST91000640NS	SATA 6Gb/s	64MB
1TB	ST91000641NS ²	SATA 6Gb/s	64MB
1TB	ST91000642NS ^{2,3}	SATA 6Gb/s	64MB
1TB	ST91000640SS	6Gb/s SAS	64MB
1TB	ST91000641SS ²	6Gb/s SAS	64MB
1TB	ST91000642SS ^{2,3}	6Gb/s SAS	64MB
500GB	ST9500620NS	SATA 6Gb/s	64MB
500GB	ST9500621NS ²	SATA 6Gb/s	64MB
500GB	ST9500622NS ^{2,3}	SATA 6Gb/s	64MB
500GB	ST9500620SS	6Gb/s SAS	64MB
500GB	ST9500621SS ²	6Gb/s SAS	64MB
500GB	ST9500622SS ^{2,3}	6Gb/s SAS	64MB
250GB	ST9250610NS	SATA 6Gb/s	64MB
250GB	ST9250611NS ²	SATA 6Gb/s	64MB
250GB	ST9250612NS ^{2,3}	SATA 6Gb/s	64MB



Pulsar.2™

The Seagate Pulsar.2 drive delivers the price-performance, data integrity and endurance benefits for performance-hungry enterprise applications.

Key Advantages

- Best-in-class MLC endurance (up to 10 full drive writes/day)
- Price-performance and reliability benefits
- Protects against unintended data change or loss—ensuring data integrity
- Provides the same feature set to look, feel and act like an enterprise hard drive—reducing system complexity and operating costs

Best-Fit Applications

- Tier 0, performance-hungry enterprise applications—virtualization, OLTP, data warehousing and cloud computing
- Blade servers, general servers and direct-attached storage
- Enterprise architectures using auto-tiering



CAPACITY ¹	MODEL	INTERFACE	FULL DRIVE WRITES/DAY ⁴
800GB	ST800FM0002	6Gb/s SAS	10
800GB	ST800FM0012 ²	6Gb/s SAS	10
400GB	ST400FM0002	6Gb/s SAS	10
400GB	ST400FM0012	SATA 6Gb/s	10
200GB	ST200FM0002	6Gb/s SAS	10
200GB	ST200FM0012	SATA 6Gb/s	10
100GB	ST100FM0002	6Gb/s SAS	10
100GB	ST100FM0012	SATA 6Gb/s	10

¹ One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.

² Self-Encrypting Drive models may require TCG-compliant host or controller support.

³ See FIPS 140-2 Level 2 Certificate at <http://csrc.nist.gov/groups/STM/cmvp/documents/140-1/1401vend.htm>.

⁴ Data provided is based on format at 512 bytes.

Video Storage Solutions

Storage solutions for DVRs and surveillance systems

Seagate has the global presence to provide the supply and support for CE integrators as well as a complete business and technology partnership for the video storage market.



Product Comparison



	PIPELINE HD®	SV35 SERIES™
Application	Mainstream CE-DVR	Video Surveillance
Description	Cool, quiet, low-power performance—perfect for high-definition consumer DVR applications	Optimized performance, power savings and improved reliability for video surveillance applications
Form Factor	3.5-inch	3.5-inch
Performance	Multi-room video delivery of at least ten simultaneous HD streams	7200 RPM
Reliability (AFR)	0.55%	<1%
Max. Ext. Transfer Rate	300MB/s to 600MB/s	600MB/s
Capacity¹	250GB to 2TB	1TB to 3TB
Interface	SATA 3Gb/s, SATA 6Gb/s	SATA 6Gb/s
Cache	8MB to 64MB	64MB
Power (Idle)	2.5W to 4.5W	3.36W to 5.4W (Idle2)

Feature Comparison



	3.5-Inch CE-DVR	Video Surveillance
Application	Pipeline HD	SV35 Series
SATA Interface	X	X
Low Power	X	
Quiet Acoustics	X	
Cool Operation	X	X
Sustainable Technology	X	
Best-in-Class Performance	X	X
Capacity Leadership	X	
24x7 Operation Capable	X	X
Extremely Low Vibration	X	

¹ One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.

Pipeline HD®


Seagate Pipeline HD drives deliver unprecedented levels of acoustic, power and vibration performance with room for hundreds of your favorite movies.

Key Advantages

- Virtually silent streaming performance as low as 19dB
- 75°C, 24-hour operation capable
- Operational power consumption as low as 3.4W
- 2.0A spin-up current limited

Best-Fit Applications

- Consumer digital video recorders
- Media servers and centers
- Home theater PCs and servers
- Cable, satellite and IPTV set-top boxes



CAPACITY¹	MODEL	INTERFACE	CACHE
2TB	ST2000VM003	SATA 3Gb/s	64MB
1TB	ST1000VM002	SATA 3Gb/s	64MB
500GB	ST3500312CS	SATA 3Gb/s	8MB
320GB	ST3320311CS	SATA 3Gb/s	8MB
250GB	ST3250312CS	SATA 3Gb/s	8MB

SV35 Series™


The Seagate SV35 series drives optimize performance, save power and improve reliability for video surveillance applications.

Key Advantages

- Higher areal density for cost-effective DVR applications
- Performance-tuned for seamless video applications
- Enterprise-class reliability for 24x7 video surveillance applications
- Built-in error recovery for non-stop streaming

Best-Fit Applications

- Video surveillance digital video recorder
- Video surveillance network digital video recorder
- Direct-attached JBOD video surveillance storage
- Network-attached JBOD video storage



CAPACITY¹	MODEL	INTERFACE	CACHE
3TB	ST3000VX000	SATA 6Gb/s	64MB
2TB	ST2000VX000	SATA 6Gb/s	64MB
1TB	ST1000VX000	SATA 6Gb/s	64MB

¹ One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.

Partner Resources and Benefits

The Seagate Partner Program (SPP) provides access to unique resources and benefits to help channel partners secure new opportunities and grow revenue and profitability.

As a registered SPP member, you enjoy the following exclusive features:

- Password-protected portal
- E-newsletter and regular news updates
- New product evaluation unit program
- Training and sales tools
- Priority support

Start reaping the rewards of SPP membership—register today at www.seagate.com/partners

- Complete the online form.
- Click through and accept our standard agreement.

Service and Support

For information regarding products and services, visit www.seagate.com/about/contact-us/technical-support

Available services include:

- Presales and Technical Support
- Global Support Services telephone numbers and business hours
- Authorized Seagate Service Centers

For information regarding Warranty Support, visit www.seagate.com/support/warranty-and-returns

For information regarding Data Recovery Services, visit services.seagate.com

For Seagate OEM and Distribution partner portal, visit www.seagate.com/partners

For Seagate reseller portal, visit www.seagate.com/partners



Seagate Technology LLC
10200 South De Anza Boulevard
Cupertino, California 95014
408-658-1000